REMARKS

Claims 32-89 are pending in the application.

Claims 32-89 stand rejected.

Claims 32, 46, 73, 84 and 87 have been amended.

Claims 90-92 have been added.

Formal Matters

Claims 73 and 84 are objected to because of informalities. Claims 73 and 84 have been amended to respond to the Examiner's concerns.

Rejection of Claims under 35 U.S.C. §112

Claim 87 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicants have amended claim 87 to address the Examiner's concerns.

Double Patenting Rejection

Claims 32-89 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-31 of U.S. Patent No. 6,377,577. Accompanying this response is a terminal disclaimer pursuant to 37 C.F.R. § 1.321(c) to overcome the obviousness-type double patenting rejection.

- 11 -

Rejection of Claims under 35 U.S.C. §102: McAuley

Claims 32-43, 45-70 and 72 stand rejected under 35 U.S.C. § 102(b) as being anticipated by McAuley et al., U.S. Patent No. 5,386,413 (McAuley). Claims 32 and 46 have been amended to distinguish more clearly over McAuley. (see application page 5, lines 3-11 and page 9, line 1 to page 11, line 4).

As amended, Claim 32 recites "selecting a highest priority match based on a type of an access control specifier of the highest priority match, wherein the type of the access control specifier of the highest priority match is based on an element of a packet header to which the access control specifier of the highest priority match is responsive." McAuley does not teach the type of prioritization recited in Claim 32. McAuley uses a prioritizer when, for example, "the destination address 201-829-4484 matches the address 201-829-XXXX stored in CAM-2 and the destination address 201-XXX-XXXX stored in CAM-1. The prioritizer circuit is provided to ensure that only the output port entry corresponding to the lowest level destination address is outputted from the memory. The prioritizer circuit selects the output of only the CAM of the lowest level in the hierarchy, which outputs a match flag." (column 9, lines 21-43).

McAuley bases prioritization on the completeness of a match, but does not disclose "selecting a highest priority match based on a type of an access control specifier of the highest priority match, wherein the type of the access control specifier of the highest priority match is based on an element of a packet header to which the access control specifier of the highest priority match is responsive," as claimed in Claim 32. Therefore, McAuley does not teach the limitations of amended Claim 32.

- 12 -

As amended, Claim 46 includes a priority encoder configured to "select a highest priority match based on said one or more types of access control specifiers." McAuley does not disclose the priority encoder claimed in Claim 46. As previously mentioned, McAuley teaches that "the prioritizer circuit is provided to ensure that only the output port entry corresponding to the lowest level destination address is outputted from the memory." (column 9, lines 21-43). McAuley's circuit prioritizes output based on "the lowest level destination address," but does not disclose a priority encoder configured to select a highest priority match based on "one or more types of access control specifiers," as claimed in Claim 46. Therefore, McAuley does not teach the limitations of amended Claim 46.

Applicants respectfully submit that claims 32 and 46, as amended, clearly distinguish over McAuley. Applicants therefore submit that independent claims 32 and 46, as well as claims 33-43, 45, 47-70, and 72, which depend on claims 32 and 46, are allowable for at least the foregoing reasons. Accordingly, Applicants respectfully submit that claims 32-43, 45-70 and 72 are in condition for allowance.

Rejection of Claims under 35 U.S.C. §102: Alessandri

Claims 32-89 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Alessandri (*Access Control List Processing in Hardware, Diploma Thesis*, pages 1-85, October 1997).
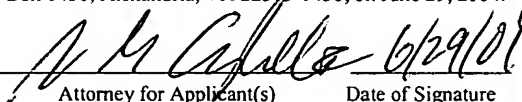
Accompanying this response is a copy of a previously submitted declaration of prior invention in the United States pursuant to 37 C.F.R. § 1.131 to overcome the cited reference. Applicants conceived the concepts presented in the cited reference prior to

October 1997. Dominique Alessandri was an intern at Cisco Systems, Inc., an entity related to the assignee of the present invention, Cisco Technology. Dominique Alessandri implemented the invention as part of his thesis work at Cisco Systems, Inc. During Dominique Alessandri's term at Cisco Systems, Inc., he was supervised by David Cheriton, one of the inventors of the present invention.
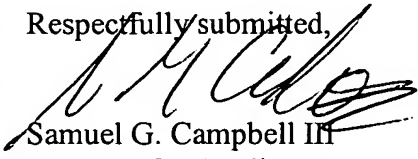
CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5080.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 29, 2004.

_____ _____
Attorney for Applicant(s)   Date of Signature

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- 15 -